U.S. SOLID

ELECTRIC STRAPPING MACHINE

MANUAL NO. 9684

CONTENTS

SAFETY INSTRUCTIONS

Please read this manual carefully. If the prompts are not followed carefully during operation, it is possible to cause operator injury.

1.1 Battery operation

Environmental protection:

1) Do not put used batteries into the household trash or waste water tank.

2) Do not burn the used batteries.

3) Dealers provide battery environmental treatment services.

Potential short circuit

1) Do not leave batteries and other metal objects together.

2) Do not open the battery,

3) Do not charge the waste battery. Change for a new one immediately.

Battery Storage

1) Store the battery in a dry and anti-frost room.
2) Maximum temperature is 50 C.
3) Please keep dry at all times.

1.2 Eye injury hazard

You may receive eye damage and even blindness if you do not wear safety glasses with side shields. Therefore, you must wear

safety glasses with side shields.

1.3 Operation

Personnel who are not properly trained are not allowed to operate the strapping tool. Before stretching the straps, read and fully understand the operating instructions. If you do not follow the operating instructions or improperly load the straps, the straps will be damaged. Please keep your fingers away from the squeezing or cutting areas, even if you are familiar with the strapping tool.

1.4 Adhesion position

You should check the pressured adhesion position. Be familiar with adhesion control and regulation. Irregular adhesion may be insecure, which can cause serious injury. Please do not ship packing containers that are not correctly packaged.

1.5 Strap distribution

Please use the specially designed distributing device to distribute the straps. Please fold the strap end into the distributing device when not in use.

1.6 Strap warning

Do not use straps to drag or lift any load, as this can easily lead to personal injury.

1.7 Broken straps hazard

Improper operation, excessive tensioning, not using straps correctly, and load on sharp corners will cause the tightening force to loosen, or the straps could eventually break:

1) The operator could lose their balance and fall.
2) The strapping tool and straps could quickly fly into the operator's face together.

⚠ Attention:

1) If the load angle is very sharp, please add edge protection.

2) Please wind the straps around the suitable load surface.

3) Operating personnel and straps must be on the same straight line when using tensioning and adhesion. Otherwise, they may be hurt by flying straps or the strapping tool. Therefore, when operating, please stand beside the straps and keep spectators far away. Please use the good quality straps recommended in the manual, with a suitable width, size, and strength. Straps that do not match this requirement may cause damage when tensioning.

1.8 Tensioning strap shearing

When shearing straps, please use a suitable shearing tool and ensure a safe distance from people. Also, do not stand in the same straight line with the straps, and keep away from any straps with a loose direction. Please use the special tool for shearing the straps. You must not use a hammer, pliers, hacksaw, axes, etc.

1.9 Fall hazard

Keep your work area clean and tidy. An untidy work area is likely to cause damage hazards. Before tensioning, a bad stay or unbalanced package can make it easy to fall, especially in the stair area. So keep the body balanced. Both feet must be on a flat and solid surface. If you feel uncomfortable, do not operate the tool. Please pay attention to the precautions specifically mentioned in the work area.

1.10 Strapping tool hazard

1) The strapping tool must be well-maintained at all times.

2) Periodically inspect for broken or worn parts. Do not use the machine if there are any cracked or worn parts.

3) Do not modify the machine, or it could cause personal injury.

TECHNICAL PARAMETERS

2.1 Description

The manufactured strapping tool uses plastic straps. Manually use the strap feeding device to wind the plastic straps around the box (bag). The strap end is inserted into the strapping tool and automatically tensioned separately after friction adhesion.

2.2 Size of the strapping tool with battery

Length: 14.17 inch

width: 5.51 inch

Height: 5.12 inch

Weight: 6.39 pounds

Battery weight: 1.1 pounds

2.3 Strapping material

Quality: flat or embossed PET (polyester) and PP (polypropylene) straps.

Applicable size : 1/2inch -5/8 inch （width)

0.4mm-1.20mm （thickness）

Please choose the appropriate size according to the strapping tool you purchased.

2.4 Strap strength

Tensile strength: 400-3200N adjustable.

(Maximum value depends on the quality of the strap).

Tensioning speed: 100-200mm/s

Adhesive strength: about 75%of plastic straps.

(Depending on the quality of the strap)

2.5 Working temperature

Ambient air temperature is 41˚F— 113˚F.

Optimum working temperature is 59˚F — 68˚F.

ACCESSORIES

⚠ Please use the parts and accessories that are mentioned in the operating instructions.

Using other accessories could hurt you or others.

3.1 Battery-powered strapping tool

As some strapping tools may use NiCd (nickel cadmium) or NiMH (nickel metal hydride) batteries, please purchase the battery for this tool according to the following parameters.

Type: Lithium battery

Voltage: 14.4V

Capacity: 4.0Ah

3.2 Battery charger

Standard charger:

INPUT: 50/60Hz, 100-245V

OUTPUT: 16.8V Max DC == 3.0A

Charging time:

Lithium battery 4.0A/h, charging time is approximately 100 minutes.

OPERATING ELEMENTS

Diode status indication	
Green	Normal working
Red flashing	Low battery, please charge
Red on	Machine failure, power off inspection
Purple on	Work finish

OPERATION

5.1 Installation

1) Please do not use the strapping tools in the rain!

2) For security, the battery is not charged when delivered.

3) Please charge the battery before use.

Insert the battery:

1) Push the battery box cover assembly upward according to the arrow direction, and insert the battery into the slot from up to down.

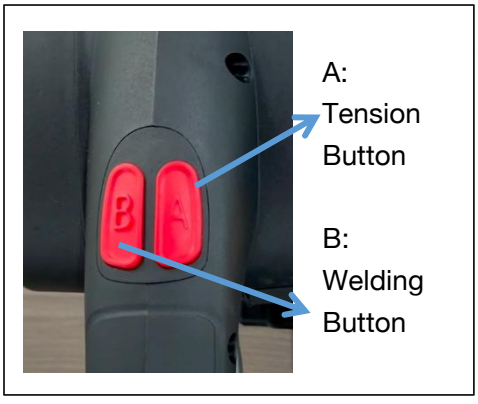
2) The electric quantity status will show briefly when inserting the battery.

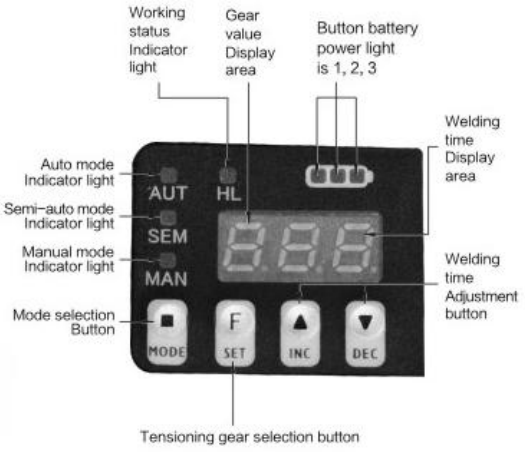
3) The LED indicator displays the battery charge status.

If the LED flashes red when tensioning or welding, it indicates that the battery power has run down and all electrical functions will be stopped.

Adhesion insufficient

⚠Warning: If the adhesion is not sufficient, please remove the straps! The battery must be charged.





5.2 Operation function description

5.2.1 Switching between normal mode and flexible mode: In normal mode (H--), press the tightening gear button for 3s to enter the flexible mode (L--). There are nine gears in the flexible mode, with a tension range of 400-1600N; in the flexible mode, press the tension gear button for 3s to switch into the normal mode (H--).

5.2.2 Mode adjustment: Briefly press the MODE key, and the three modes (AUT/ SEM / MAN) can be selected or cycled through.

5.2.2.1 In the AUT mode, briefly press the tension button, and the belt will be automatically tightened. When the set tension value is reached, the belt will be welded and cut automatically;

5.2.2.2 In the semi-automatic mode (SEM), the tension button should be pressed and held all the time. When the set tension value is reached, the machine will start automatic welding and cutting. (If the take-up button is released during tightening, the tension wheel will stop rotating. Press the welding button at this time, and the baler will start to weld and cut the belt.)

5.2.2.3 When manual mode (MAN) is used, the tension button must be pressed and held all the time. When the set pull value is reached, the fusion button must be pressed, and the belt will be fused and cut manually.

5.2.3 Tension adjustment: Press the SET key briefly to adjust the tension gear (nine gears are used, where the tension in the first gear is the minimum and the tension in the ninth gear is the maximum).

5.2.4 Welding time adjustment: Press the INC key for a short time, and the weld time will be increased. Press the DEC key for a short time to reduce the welding time (the adjustment range is 0.1s each time, and the value display interval is 0.5-3.5s).

5.2.5 Display of cumulative welding times (six digits): after unlocking, press the mode selection button (MODE) for more than 3s, and the interface displays XXX (decimal point is displayed on the right end of the digital tube), indicating the value of hundreds, tens and digits of cumulative welding times. Then press MODE to display XXX (no decimal point is displayed on the right end of the digital tube), indicating 100,000 and 10,000 1,000 values digits of

accumulated welding times, press MODE to cycle the display of values, and press any other key to return to the main interface.

⚠ The machine’s LOCK & UNLOCK settings:

1. No packing operation state, 120 seconds into sleep, to wake, press the pull-down button, and the machine will go into the working state.

2. In flexible mode, the tension force and tension speed decrease, which is suitable for PP belt packaging.

3. Lock key and unlock operation: It will be automatically locked after 30 seconds without any operation on the machine. A first long press of the "DEC" button for two seconds, the machine prompts the sound to start, and then press the "fusion button".

a. Strap winding

Wind the straps as shown in the figure.

⚠ Warning! Keep away from oil, grease and other dirt when welding plastic straps. Dirty straps can't be welded.

b. Strap insertion

Lift the handle with your right hand, insert straps with your left hand, stack the two pieces horizontally and release the handle.

c. Strap tensioning

Press the tensioning button, then release the switch knob after reaching the strap's tensioning strength.

Note: Press the tensioning button until the LED displays purple; the tightening protection doesn't affect the next step.

⚠ Keep the strapping tool's equilibrium shifting when tensioning. So please do not obstruct the direction of movement of the strapping tool.

d. Contact adhesion

Press the welding button, the hands leave immediately, the plastic strap is welded, and the redundant straps are cut off.

During welding, the LED displays in green or purple. Welding is completed.

e. Remove the strapping tool

Lift the handle and loose straps. Pull the machine to the right side and away from the straps.

Note: Automatic mode, only need to operate steps a, b, c, and e. When the strapping machine is stuck and not moving, you must first pull out the battery, then cut the strapping strap, remove the panel screws, and then remove the strapping strap.

5.3 Adhesion control

Correct adhesion:

Weld the entire width of the strap. The welding length is about 19 mm. A small amount of molten plastic is allowed to overflow the

Welding time is too short:

The entire width is not welded, and the adhesion is insufficient.

⚠ **WARNING! Straps with insufficient welding must be removed. Adjust the welding time.**

Welding time is too long:

If the welding time is too long, straps can overheat, and molten plastic overflows on two sides. Adhesion is affected.

⚠ **WARNING! Straps with insufficient adhesive strength must be removed. Adjust the welding time.**

REPLACING WORN PARTS

⚠ **Please remove the battery every time maintenance is performed.**

Cutter: First, remove the left shield screw and remove it. Then remove the screw on the cutter and remove it. Remove the cutter. Keep the cutter spring. Install in the reverse order.

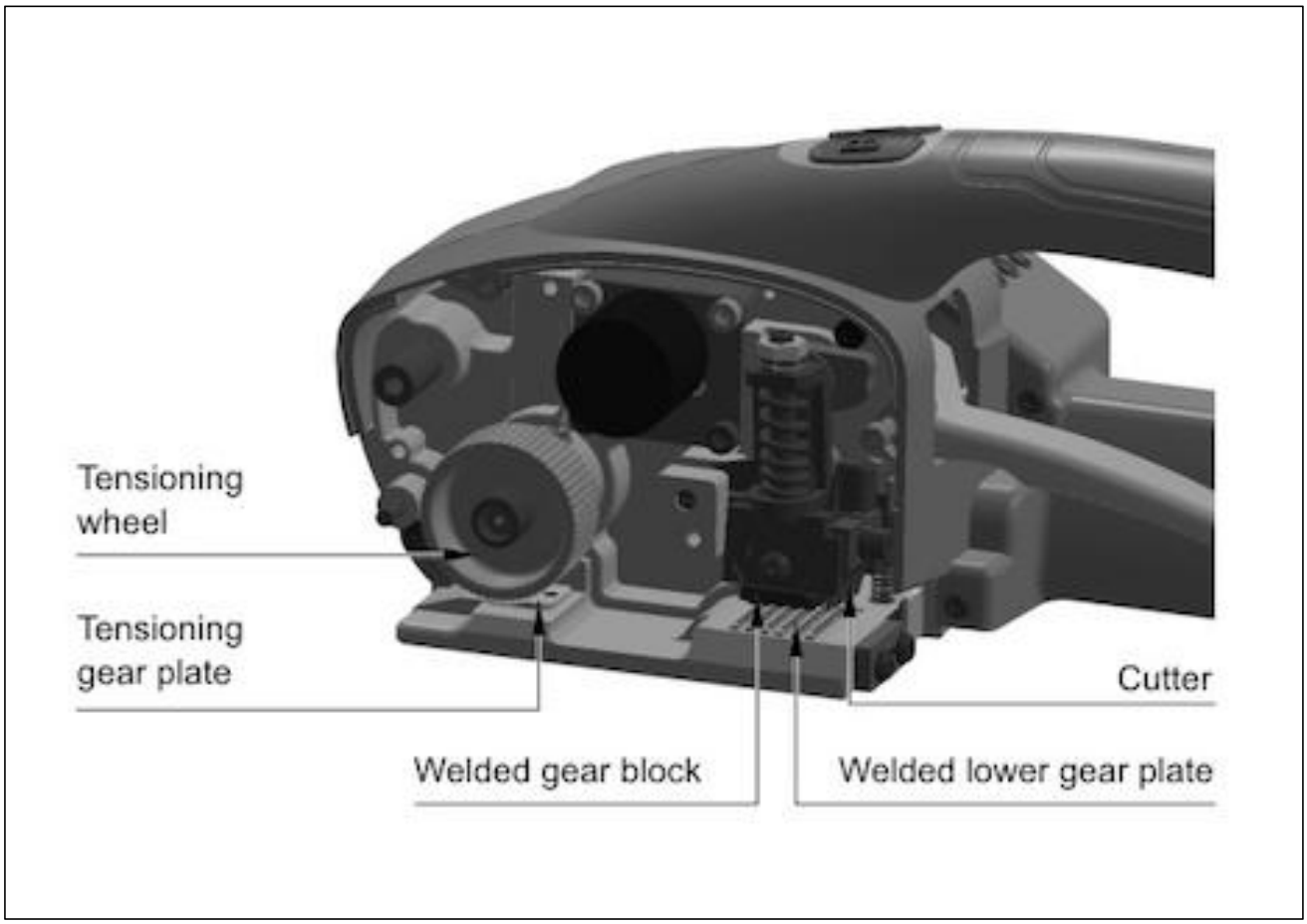
Welding tooth plate: remove the fixing screw of the lower fusion tooth plate to remove the lower fusion tooth plate. Install in the opposite order.

Tensioning toothed plate: remove the screw fixing the toothed plate to the base, lift the handle to remove the toothed plate for replacement, and install it in the reverse order.

Tensioning wheel: first, remove the left cover screw, then take out the tension wheel, and then take out the two bearings on the tension wheel; install in reverse order.

Cutting belt adjustment

Cutter adjustment: If the cutting belt is not smooth, replace the cutter or cutter spring. Refer to the above susceptible parts for replacement.


Tensioning
wheel
Tensioning
gear plate
Cutter
Welded gear block
Welded lower gear plate

COMMON FAULTS

1. Special cause: If the machine is stuck in the strapping process, which results in straps remaining stuck in the machine. Immediately cut off power, cut the straps, remove the screws on the left and right panel covers and move, remove the straps, and check the machine. Check the lines on the travel switch fall off and replace the micro switch.

2. Press the welding and tensioning button. If the motor doesn't rotate, check the motor and micro switch, and replace the motor and micro switch.

Machine fault code description:

E0.2	Tape take-up and tensioning motor timeout fault (not completed for more than 10 seconds).
E0.3	Belt take-up and tensioning motor short circuit fault.
E0.4	Abnormal fault of take-up and tensioning motor / abnormal current induction fault of the take-up and tensioning motor.
E0.5	Bonding and welding motor short circuit fault.
E0.6	Fault of adhesive welding motor / abnormal current induction fault of adhesive welding motor.
E1.0	Fault as the motor still outputs torque when the speed is 0 RPM /motor locked rotor fault.
E1.1	Overcurrent protection.
In the case of the above fault display, you can press any key to eliminate it and enter the standby mode. If it does not return to normal, please contact the supplier for the resolution.	

Contact

Feel free to visit our website:

www.ussolid.com

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